7035/4X150D

Beam Power Tube

FORCED-AIR COOLED

COAXIAL-ELECTRODE STRUCTURE — 370 WATTS CW OUTPUT UP TO 150 Mc
UNIPOTENTIAL CATHODE — 140 WATTS CW OUTPUT AT 500 Mc
COMPACT DESIGN — INTEGRAL RADIATOR

For Use at Frequencies up to 500 Mc

The 7035/4X150D is the same as the 7034/4X150A except for the following items:

Heater, for Unipotential Cathode:
- Voltage (AC or DC)[a] . . . . 26.5 ± 10% volts
- Current at heater volts = 26.5. . . . . . 0.58 amp

[a] Because the cathode is subjected to considerable back bombardment as the frequency is increased with resultant increase in temperature, the heater voltage should be reduced depending on operating conditions and frequency to prevent overheating the cathode and resultant short life.

CHARACTERISTICS RANGE VALUES FOR EQUIPMENT DESIGN ←

	Note	*Min.*	*Max.*	
Heater Current	1	0.50	0.62	amp
Direct Interelectrode Capacitances:				
Grid No.1 to plate	2	-	0.05	μμf
Grid No.1 to cathode, grid No.2, and heater	2	14.5	17.0	μμf
Plate to cathode, grid No.2, and heater	2	4.0	4.8	μμf
Grid-No.1 Voltage	1,3,4,5	-32	-46	volts
Grid-No.2 Current	1,3,4,5	-5	3	ma
Power Output	4,5,6	100	-	watts

Note 1: With 26.5 volts on heater.

Note 2: With cylindrical shield having inside diameter of 1-13/16" completely surrounding radiator, and insulated from the top and sides of it by a 1/16" thickness of insulating material; and with a cylindrical shield having inside diameter of 1.460" and length of 5/16" surrounding the grid-No.2 ring terminal and insulated from it. Both shields are connected to ground.

Note 3: With dc plate volts = 1000, dc grid-No.2 volts = 300, and grid-No.1 voltage adjusted to give plate current of 150 milliamperes.

Note 4: With forced-air cooling as specified under GENERAL DATA for *Air-System Socket*.

Note 5: Heater voltage must be applied for at least 30 seconds before application of other voltages.

Note 6: With heater volts = 24.5, dc plate volts = 1000, dc grid-No.2 volts = 250, dc grid-No.1 volts = -90, maximum dc grid-No.1 milliamperes = 20, grid-No.1 signal voltage adjusted to give dc plate current of 200 milliamperes, and a frequency of 475 Mc.

SPECIAL PERFORMANCE DATA

Interelectrode Leakage:

This test is destructive and is performed on a sample lot of tubes from each production run under the following conditions: ac heater volts = 29.1, no voltage on other elements,

← Indicates a change.

and specified forced-air cooling for *Air-System Socket*. At the end of 500 hours, with tube at 25° C, and with no voltage applied to heater, the minimum resistance between indicated electrodes as measured with a 500-volt Megger-type ohmmeter having an internal impedance of 2.5 megohms, will be:

Grid No.1 and grid No.2	10 min.	megohms
Grid No.1 and cathode	10 min.	megohms
Grid No.2 and cathode	10 min.	megohms